# Best Management Practices for Dismantling of Vehicles for Parts Selling and Salvage

**1. Non-Storm Water Discharges**

a. The following uncontaminated non-storm water discharges are allowed:

Water line flushing, landscape irrigation, diverted stream flows, uncontaminated groundwater infiltration, uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, and fire fighting.

Care will be taken to ensure that these allowable non-storm water discharges are not exposed to industrial materials or activities that could contaminate the water.

b. Washing of building sides and roofs, facility vehicles, and equipment:

1.) Each vehicle or piece of equipment associated with the facility's operations may be washed up to six times during any six-month period, except that facility-owned delivery vehicles or trucks may be washed as needed using the practices listed in this section. Note: BMPs for the washing of vehicles and parts to be recycled or dismantled are presented in Section 10.

2.) Any washwater with a visible oily sheen will be treated to remove the sheen prior to discharge of the washwater to surface water or groundwater.

3.) Washing of building sides and roofs, facility vehicles, and equipment will occur on or near grass, soil, or gravel areas to the maximum extent practicable to allow washwater to seep into the soil and avoid the direct discharge of solids and particulate matter to surface waters. Significant accumulations of solids and particulate matter in areas used for washing activities or subject to erosion will be periodically removed or otherwise properly managed to avoid transport to surface waters. Degreasing of engines and oily parts and equipment will not be conducted on pervious surfaces.

4.) When washing activities (except degreasing) occur on impervious surfaces, suspended solids and particulate matter will be controlled by (1) directing washwater to a settling basin, tank, or other settling device to remove suspended solids and particulates prior to discharge to surface waters or a seepage area, (2) temporarily blocking, barricading, or plugging areas of channelized flow to surface waters, such as storm sewers, and allowing suspended solids and particulate matter to settle out prior to discharge to a surface water or seepage area, or (3) directing washwaters to grass, soil, or gravel areas where the water can seep to groundwater. Solids and particulate matter collected in a settling device or area will be periodically removed or otherwise properly managed to avoid transport to surface waters.

5.) When washing the sides and roofs of buildings, dirt and paint deposits will be cleaned up, where practicable, prior to the next storm event.

6.) Biodegradable soap or detergent with a phosphorus content of 0.5% or lower will be used for washing activities. Nonbiodegradable cleaning additives (such as degreasing chemicals) will not be used for washing facility vehicles or equipment where there is discharge to surface water or groundwater.

7.) Washwater with a oil and grease sheen resulting from incidental contact with an engine or oily piece of equipment that is not associated with a degreasing activity will be treated with an oil absorbent material or an oil/water separator device to remove the sheen prior to discharge. Oil absorbent materials will be replaced on a periodic basis to ensure absorbency capacity and oil treatment devices will be maintained on a periodic basis to remove collected oils and grease and ensure proper operation. Used absorbents will be recycled or properly disposed of.

8.) Discharges from the degreasing of engines or oily pieces of equipment using chemical solvents or detergents, steam, or high pressure water will be conveyed to an oil/water separator device, or equivalent measure, prior to discharge, except in cases of emergency degreasing associated with equipment malfunction. Oil treatment devices will be maintained on a periodic basis to remove collected oils and grease and ensure proper performance.

9.) Washwater from the emergency degreasing of engines or oily pieces of equipment associated with equipment malfunction will be captured and containerized to the maximum extent possible and treated with an oil/water separator or oil absorbent material prior to discharge. A written record will be maintained by the permittee of all instances of emergency degreasing, detailing the date of occurrence, person performing the cleaning, how the washwater was treated and discharge location (groundwater or surface water).

10.) Discharges from the following washing activities are not allowed:

- Discharge of washwater that would impair the water quality of a downstream wetland (NR 103), outstanding resource water (NR 102.10), or exceptional resource water (NR 102.11).
- Discharge of pollutants in washwater in quantities that are harmful to off-site animals, plants, or aquatic life, or that would violate surface water quality standards (NR 102 and NR 105) or groundwater quality standards (NR 140).
- Use of degreasing agents containing halogenated hydrocarbons (i.e., methylene chloride, trichloroethane) or bio-accumulating toxic substances.
- Washing buildings with asbestos siding or shingles or lead-based paint.

c. All other non-storm water discharges, including process wastewater, cooling water, and building sink and floor drain discharges, will either be eliminated or covered under a separate WPDES permit.

**2. Sediment Deposits on Impervious Surfaces**

a. All accessible paved areas will be swept as needed to prevent the accumulation of sediment deposits.

b. Catch basin inserts or filter systems may be installed in storm sewer inlets or catch basins to trap incoming sediment and metal particles and to remove petroleum fluids. The inserts will be cleaned and replaced as needed to maintain their effectiveness.

**3. Spills and Leaks**

a. Spill kits, in most cases consisting of granular absorbents (oil dry), absorbent socks, absorbent pads, a drip pan, a broom, and shovel, will be placed at locations where a spill or leak could occur. These locations may include areas used for:

1. Vehicle crushing
2. Vehicle dismantling
3. Vehicle gas tank removal

4. Storage of oily parts
5. Equipment maintenance
6. Fluid storage
7. Fueling operations

b. If a spill or leak occurs, facility employees will use absorbents or drip pans to contain the fluid. The spent absorbent will be promptly cleaned up and placed in a covered container. Used absorbents will be properly disposed of or recycled.

c. Spill control procedures will be developed for dismantling activities, maintenance activities, fueling operations, vehicle crushing, and accidents. Employees will be trained to properly handle materials, to respond to and contain a spill, to clean up and dispose of used absorbents, and to prevent future leaks and spills.

d. Where applicable, facilities will meet spill prevention, control and countermeasure (SPCC) plan requirements.

e. Facilities will meet the spill reporting and notification requirements set forth in NR 706 of the Wisconsin Administrative Code, *Hazardous Substance Discharge Notification and Source Confirmation Requirements*.

**4. Erosion and Sediment Sources: Non-Structural Control**

a. A protective vegetative cover will be maintained, where possible, in unpaved areas that are not used for recycling, dismantling, storage, or parking.

b. In other unpaved areas including recycling, dismantling, storage and parking areas subject to erosion, non-structural measures such as the placement of crushed stone or gravel, catch basin inserts, silt fences, hay bales, and soil stabilization measures (geotextile fabrics, mulches, etc.) will be used to prevent sediment runoff. Non-structural measures will be periodically inspected and maintained as needed to provide good performance.

c. Vehicles and parts will not be stored in highly erosive areas, riverbanks, or channels.

**5. Inbound Vehicles**

a. Incoming vehicles will be inspected and inventoried to check for fluid leaks and unwanted materials. All leaks will be contained or eliminated as soon as practical after a vehicle enters a yard.

**6. Parts Dismantling Activities**

a. Dismantling and removal of engines, transmissions, and other fluid-containing parts (excluding gas tanks) will be conducted inside a building or outside on an appropriately designed hard surface pad. If a roof *is* provided over the pad, measures will be taken to prevent the discharge of vehicle fluids from the pad. If a roof is *not* provided over the pad, spill control materials will be available and used immediately to control and clean up any fluid spills.

b. Fuel tanks will be drained into suitable tanks or containers on a hard surface outside. Fully drained tanks may be stored outside without containment.

c. Fluids and storm water that accumulated in a container or containment system will be recycled, reused, properly disposed of, or adequately treated to remove contaminants prior to discharge.

d. All employees who dismantle or remove parts containing fluids will be adequately trained on spill prevention and fluid management procedures.

e. At "you-pull-it" facilities (where customers dismantle parts), vehicles will be drained of air conditioner, engine, transmission, radiator, brake, and power steering fluids before the vehicles are placed in the yard and made available for removal of parts by customers. Customers will be instructed on proper procedures for removing parts to prevent leakage and spillage. Spill control and fluid recovery equipment and supplies will be provided for convenient customer use.

**7. Fluids Draining and Removal Activities**

a. Antifreeze will be drained from each vehicle during dismantling. The coolant will be reused, sold, or sent to a licensed recycler.

b. Brake fluid will be drained from each vehicle or fluid-containing brake parts will be removed and drained.

c. Fuel will be drained from each vehicle prior to storage at the facility. Good fuel may be reused. Unstable or contaminated fuel will be sold to a reblender to be recycled, or properly disposed of.

d. Engines and transmissions that are removed will be drained of engine oil and transmission fluid. Plugs will be used to prevent leakage from drained engines, or they will be stored in leak-proof containers. Drained oils may be used in an approved used oil burner, sold to a licensed oil recycler, or otherwise properly disposed of.

e. Other fluids that may be drained include windshield washer fluid, power steering fluid, and rear axle housing fluid.

**8. Storage and Handling of New and Used Fluids and Section 313 Water Priority Chemicals**

a. Fluids and water priority chemicals will be stored in properly labeled leak proof tanks, drums, or containers that are located under roof, or in outside liquid-tight containment systems that prevent exposure to storm water run-off.

b. All applicable container, labeling, and secondary containment regulations will be followed.

c. A careful visual inspection by a facility employee will be conducted before rainwater is released from a secondary containment system for new or used petroleum products. The water may be released only if there are no signs of contamination. A visual inspection report will be written in a log for each draining of a secondary containment system.

d. Fluids will be separated. Used oils (engine, transmission, rear end, brake, and power steering fluids) may be stored together for use in a used oil burner or recycled. Antifreeze and fuel will each be stored separately. Solvents and degreasers will not be mixed with oils or fuel.

**9. Batteries, Catalytic Converters, Mercury Switches, and Sodium Azide Air Bags**

a. All batteries will be removed from the vehicles and placed either in a covered storage area on an impervious surface, or in a covered leak-proof container. Cracked or broken batteries will be handled and stored to prevent the release of battery acid to the environment. If any acid leaks, it will be neutralized with sodium carbonate, soda ash, or other absorbent material. Batteries stored on pallets will be stacked upright, up to 3 rows high, with cardboard between the layers. The batteries will not protrude over the edge of the pallets. For shipment, batteries will be either wrapped in plastic, banded to a pallet, or placed in a leak-proof container.

b. Catalytic converters will be removed from the vehicles and stored in a container.

c. Deployed air bags will be left in the vehicle. Undeployed air bags will be removed from the vehicles for resale.

d. All accessible mercury switches will be removed from the vehicles prior to crushing. Mercury switches will be stored in leak proof containers.

**10. Parts Washing and Cleaning**

Cleaning and washing of recycled vehicles and parts:

a.) Washing of recycled vehicles and parts will be conducted on a contained or indoor impervious surface. Note: Buildings used for washing activities must meet the plumbing code (COMM 82) and the storage and disposal of non-domestic wastewater from these buildings must comply with NR 113, 213 or 214.

b.) Either water or biodegradable soap or detergent with a phosphorous content of 0.5% or lower will be used for washing vehicles and parts, if the treated water will be discharged to groundwater or surface water.

c.) The washwater will be conveyed to an oil/water separator device, or equivalent measure, prior to discharge. The washwater may also be recycled or disposed of.

d.) If degreasing chemicals or solvents are used, the washwater will either be recycled or properly disposed of.

e.) The oil/water separator device or equivalent measure will be cleaned and maintained as needed to ensure proper performance. The device will be inspected at least monthly during operation, and dates and descriptions of maintenance activities will be recorded.

**11. Accumulated Debris**

Debris (excluding vehicle parts and hulks) will be properly disposed of within a reasonable period of time, but not longer than two years (subject to solid waste regulations).

**12. Vehicle Parts Storage**

a. Greasy parts and parts with fluids will be stored indoors; in a covered, hard surface containment pad; in covered, leak-proof containers; or in an enclosed trailer with a steel floor, or in a manner to prevent the discharge of fluids.

b. Radiators will be drained and stored under roof or in a container.

c. Tires will be stored in semi-trailers or in separate piles of 1,300 tires or less. No more than one semi-load of tires will be stored on-site at any time.

**13. Vehicle Crushing Operations and Other Handling and Processing Equipment Areas**

a. Prior to crushing on-site (by either the auto recycler or by a contract crusher), the fuel, air conditioner, engine, transmission, brake, and radiator fluids will be drained inside a building or outside on an appropriately designed hard surface pad.

b. The gas tank, tires, battery, known mercury switches, and radiator will be removed from vehicles prior to crushing.

c. Absorbents and appropriate containers will be used to control fluid leaks and spills during renovation, removal, installation, or operation of outdoor processing equipment and crushers.

d. Vehicles and equipment will be kept reasonably clean of oil and grease, fluids, metal particulates, and debris by wiping down, washing off-site, or washing on-site in accordance with BMP #1(b) above.

e. Appropriate spill prevention and response measures will be provided for portable and mobile equipment that contains fluids. Containment **may** be provided for portable and mobile equipment.

f. A written preventive maintenance program will be developed for crushers and other processing and handling equipment and vehicles which could break down or fail, resulting in discharges of pollutants to surface or ground waters. The program will include:

- Schedule for periodic inspections
- Inspection forms and checklists
- Procedures and guidelines for replacing or repairing excessively worn, corroded, leaking, or damaged parts and materials
- Schedule for major overhauls of equipment and vehicles

**14. Erosion and Sediment Sources: Structural Control**

a. All facilities with unpaved operational areas will prepare a paving/capping plan, which identifies areas to be paved, and a proposed schedule. Areas to be paved may include areas that continue to erode despite non-structural controls, storage areas for vehicles or parts, and roadways subject to erosion.

b. The following measures may be used to reduce sediment loading to surface waters:

1. Detention Basins
2. Oil-Water Separators
3. Vortech/Stormceptor Systems (or equivalent)
4. Sand Filters
5. Bio-Retention Zones
6. Infiltration System

c. The CCP consultant will work with the facility operator to determine the need for structural sediment controls and the best available options.

d. Structural control measures should be designed to accommodate the runoff from at least a 3.5-inch, 24-hour storm event.

e. Structural control measures will be periodically inspected, cleaned, and maintained to provide good performance.

**15. Runoff Problems**

a. Ponding or poor drainage that contributes to water pollution problems will be mitigated by regrading and/or providing drainage systems designed for the runoff from a 2.0-inch, one-hour storm event.

b. All ditches and channels on the property will be properly sized and maintained to prevent scouring and erosion caused by high flow velocities.

**16. Other Source Areas Identified in the SWPPP**

Appropriate BMPs to be determined on a case-by-case basis. Prior to implementation, the BMPs will be reviewed and approved by the CCP consultant.

**17. Other Materials with a Significant Risk of Storm Water Contamination**

a. Source areas will have no significant exposure to storm water, or

b. Appropriate BMPs will be installed to manage the pollutants. Prior to implementations, the BMP will be reviewed and approved by the CCP consultant.